

A HIGH SPEED PHOTO-PRINTING APPARATUS**ABSTRACT**

A thermal printer is disclosed which includes a plurality of thermal print heads, each of the plurality of thermal print heads being operable to print a distinct one of a plurality of colors. The plurality of thermal print heads may print output at a plurality of spatial resolutions. The thermal printer may include dot size varying means for varying perceived levels of color printed by the thermal printer by varying sizes of dots printed by the plurality of thermal print heads. The printer may perform various image processing steps on an image to be printed, such as tone scale adjustment, thermal history control, and common mode voltage correction, to improve the perceived quality of the printed image. The thermal printer may be incorporated into a digital photo-printing vending machine for printing images provided by a customer.